SCHEDULE OF CONDITIONS FOR THE IMPORTATION OF CATTLE EMBRYOS INTO NEW ZEALAND FROM NORTH AMERICA

1. PERMIT

- 1.1 A permit to import must be obtained from the Chief Veterinary Officer, MAF Quality Management, Ministry of Agriculture and Fisheries, PO Box 2526, Wellington, New Zealand.
- 1.2 Permits will be issued for single consignments only, and the importer must supply the following information:
 - 1.2.1 name and address of exporter
 - 1.2.2 breed and identification of donors
 - 1.2.3 number of embryos required
 - 1.2.4 proposed collection period
 - 1.2.5 proposed date of importation

2. DOCUMENTATION

- 2.1 The permit and all the required certification must accompany the consignment to New Zealand.
- 2.2 The term donor animals refers to female animals from which embryos are collected, and to the males whose semen is used to fertilize their ova.

3. ELIGIBILITY

3.1 The donor animals must have been continuously resident in the USA and/or Canada for the whole of the 60 days immediately prior to the commencement of the pre-collection residency period. During this time the animals have not been subject to quarantine or movement controls or restriction on account of disease.

NOTE: Animals which are of United Kingdom (UK) origin, which have been imported from the UK since January 1, 1982, or which are derived from a UK origin animal since January 1, 1982, are not eligible as donors of embryos for export to New Zealand.

- 3.2 Each donor animal must remain resident on the center or farm where the collections are to occur for the whole of the 30-day period prior to the first collection of embryos for each consignment.
- 3.3 The embryo collection team must be under the supervision of a veterinarian who is:

EITHER: 3.3.1 i) certified by the American Embryo Transfer Association (AETA):

and $% \left(1\right) =0$ ii) accredited by the United States Department of Agriculture (USDA)

- OR: 3.3.2 certified by the Agriculture Canada Accreditation program for the Export Certification of Embryos.
 - 3.4 The semen used to fertilize the embryos must be:

EITHER: 3.4.1 semen from a donor bull of equivalent isolation/tested

health status as the donor female;

- OR: 3.4.2 semen collected and certified as eligible for export to New Zealand from Canada or the USA;
- OR: 3.4.3 semen collected from bulls meeting;
 - either: 3.4.3.1 the standards as detailed by the "Certified Semen Services (CSS) Minimum Requirements for Health of Bulls Producing Semen for AI"
 - or: 3.4.3.2 the Agriculture Canada standards for the Health Testing of Semen Donor Bulls.

NOTE: Semen of United Kingdom origin collected after January 1982 and imported into the United States or Canada is NOT acceptable for fertilization of embryos for export to New Zealand.

3.5 Only embryos with intact zona pellucida and which conform to the standards of Grade A or B embryos as described in the "Manual of Procedures for the Sanitary Collection of Embryos" of the International Embryo Transfer Society (IETS) are eligible for importation to New Zealand.

4. QUARANTINE AND TESTING

- 4.1 The animal health tests required are stated in the Veterinary Certification.
- 4.2 All serological tests must be performed at a laboratory approved for the purpose by either the USDA or Agriculture Canada.
- 4.3 All donors of bovine embryos from Canada or the United States for export to New Zealand and any in-contact animals on the center or farm where collection occurs (including teasers) must undergo a pre-collection residency for 30 days. The donors must reside at a place approved for the purpose by USDA or AgCanada until the completion of all required testing.
- 4.4 In the event of any donor or in-contact animals failing any of the prescribed tests, the Chief Veterinary Officer (NZMAF) may withdraw the Permit to Import or take any other action as may be appropriate.
- 4.5 All sample collections for diagnostic tests, all collections of embryos and all servicing of storage containers prior to export must be performed under the direct supervision of the approved embryo transfer team veterinarian or a full time veterinarian employed by AgCanada or USDA/APHIS.
- 4.6 The final audit, the placement of embryos into a new or properly disinfected used storage container that is filled with new (unused) liquid nitrogen just prior to placement, and the sealing of the storage containers prior to export of the embryos to New Zealand must be performed under the supervision of a full-time veterinary officer of the USDA or Agriculture Canada.

5. IDENTIFICATION

- 5.1 The identification of the embryos must be shown on the veterinary certificates accompanying the embryos.
- 5.2 All ampoules or straws must be permanently marked with

identification of donors and the date of collection.

5.3 If code is used to identify ampoules or straws, it must accompany each consignment.

6. ENTRY CONDITIONS

- 6.1 On arrival in New Zealand the consignment will be checked by an Inspector under the Animals Act 1967 and, providing the certification complies with the conditions of the permit to import, a permit to land will be issued and the consignment released to the importer.
- 6.2 The importer must keep full records of where the embryos were distributed and make this available to an inspector of the New Zealand Ministry of Agriculture and Fisheries when required.

7. REVIEW

7.1 Conditions for importation may be reviewed if there are any changes in the import policy or the animal disease status of Canada or the United States, or at any time at the discretion of the CVO.

PLEASE NOTE

The attached health conditions have been agreed as being suitable for trade between the exporting and the importing countries. It is expected that the donor animal/s will meet the conditions in every respect.

Occasionally it is found that, due to extenuating circumstances, the animal/s do not comply completely with the requirements. In such cases applications for dispensations will be considered and issued at the discretion of the NZMAF, but only if the following information is forwarded by the certifying government's Veterinary Authorities:

- which clause/s of the health requirements cannot be met and how this has occurred;
- 2. the reason the animal/s are considered to be of an "equivalent health" status and/or what proposal is made to return the animal/s to an equivalent health status as set out in the health conditions;
- 3. the reasons why the Veterinary Authorities believe this proposal should be acceptable to the NZMAF and their recommendation for its acceptance.

Health Certificate No
(Valid only if the USDA Veterinary Seal Appears over the Certificate No.
ZOO-SANITARY CERTIFICATE:
Species: BOVINE EMBRYOS
To: NEW ZEALAND
Import Permit Number
Exporting Country: UNITED STATES OF AMERICA Ministry/Department: UNITED STATES DEPARTMENT OF AGRICULTURE Service: ANIMAL AND PLANT HEALTH INSPECTION SERVICE, VETERINARY SERVICES Region/District/Province/State:
I. INFORMATION CONCERNING DONORS, SIRES, AND EMBRYOS
Number of Reg. Herd Book Collec. ID No.'s Number of Embryos Breed Name Number Date of Straws Straws
Donor Cow
Donor Sire
Donor Cow
Donor Sire
Total Number of Straws
II. ORIGIN OF THE EMBRYOS:
IETS freeze code of the company processing the embryos
Exporter's Name and Address:
Place of origin of each collection date of embryos:
III. DESTINATION OF THE EMBRYOS:
Consignees Name and Address:
Nature and identification of the means of

transport:_____

Health Ce	rtific	cate	e No.			
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	Appea	ars	over	the	Certificate	No.)

IV. VETERINARY CERTIFICATE A: COLLECTION TEAM VETERINARIAN'S DECLARATION

I,				(BLOCK LETTERS), of							
					(ADDRESS)	, bei	ing the	appı	roved	veteri	narian
responsible	for the	supervision of	the	team	collecting	the	embryos	to	which	this	
certificate	applies,	certify that:									

1. **IDENTIFICATION**

Each donor animal for this consignment was clearly identified with visible marks and a full description of each is given on this health certificate.

2. **RESIDENCY**

- 2.1 The donor dams for this consignment were continuously resident in Canada and/or the USA for the whole of the 60-day period prior to the commencement of the pre-collection residency period and for the 30 days preceding the collection of embryos has been resident on the property at which the embryos were collected.
- 2.2 The donor dams were not animals which had been imported to the USA from the United Kingdom (UK) after 1 January, 1982, were not of UK origin by birth since 1 January 1982, and were not derived from an animal originating from the UK (or from semen or an embryo from the UK) since 1 January 1982.

3. PROPERTY OF ORIGIN OF THE EMBRYO DONORS

- 3.1 After due enquiry, I am satisfied that, for the listed calendar periods, the following diseases have not been known to occur on any premises where any donor or teaser animal has been during the 1 year period prior to the last collection of embryos for this consignment:
 - 3.1.1 vesicular stomatitis 2 years.
- 3.2 After due enquiry, I am satisfied that;
 - $3.2.1\,$ No case of vesicular stomatitis has been known to occur within a radius of $100\,$ km ($60\,$ miles) of the property where the embryos were collected, during the 1 year period prior to the last collection of embryos for this consignment.
 - 3.2.2 No case of bluetongue or epizootic hemorrhagic disease of deer (EHD) has been known to occur on the property during the 1 year period prior to the last collection of embryos for this consignment.
- 3.3 After due enquiry, and to the best of my knowledge and belief, neither the donors nor any of their sires or dams are known to carry any genetic defects.

4. PRE-COLLECTION RESIDENCY

- 4.1 Each donor for this consignment and any in-contact animals (including teasers) were resident on the property where the collection takes place for the whole of the 30-day period prior to the first collection of embryos (or semen in the case of donor males) for this consignment.
- 4.2 During the pre-collection, collection and post-collection periods, each donor and any in-contact animals were inspected by me at regular intervals. During these periods and on each day of collection of embryos for this consignment,

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	Apr	ears	over	the	Certificate	No.)

all remained healthy and free from evidence of infectious or contagious disease.

4.3 All collections of samples for diagnostic testing were performed under my supervision and samples were forwarded for testing to a laboratory approved for the purpose by Agriculture Canada or the USDA.

5. **TESTING AND TREATMENT**

- 5.1 All testing performed during the pre and post-collection periods was performed at laboratories approved for the purpose by the USDA.
- 5.2 During the interval 40 to 60 days following the last collection of embryos for this consignment (or semen in the case of donor males resident in the Collection Center), each donor and any in-contact animals were subjected to the following tests with negative results in each case:
 - 5.2.1 an agar gel immunodiffusion test for epizootic hemorrhagic disease of deer (and if an equivocal result was obtained, a confirmatory serum neutralization test is acceptable); Date of test:
 - 5.2.2 a complement fixation test or a serum neutralization test for vesicular stomatitis, Indiana and New Jersey serotypes; Date of test:
 - 5.2.3 a complement fixation test for Q fever (negative is one in which there is no fixation of complement at a dilution 1:10). Date of test:
- 5.4 At some stage in its life, prior to the export of the embryos to New Zealand, each donor (male and female) of the Angus, Galloway or any derived breed was subjected to a plasma test for mannosidosis and if equivocal results were obtained, a granulocyte test as appropriate, with negative results in each case.
- 5.5 At some stage in its life, prior to the export of the embryos to New Zealand, each donor (male and female) of the Brahman, Indu-Brazil, Beef Shorthorn or any derived breed was subjected to a test for type 2 alpha-glycogenosis (Pompe's disease) and was considered not to be a carrier of the recessive gene.

6. <u>SEMEN USED TO FERTILIZE THE OVA</u>

OR:

- 6.1 All natural matings or artificial inseminations and embryo collection procedures were observed by me and the embryos are accurately certified as to their identity and date of collection.
- 6.2 The semen used to fertilize the embryos was:

EITHER: 6.2.1 semen from a donor bull of equivalent isolation/tested health status as the donor female;

NOTE: Requirements under headings 3,4 and 5 apply in full for these donors.

6.2.2 semen collected and certified as eligible for export to New Zealand from Canada or the USA;

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OR:

6.2.3 semen collected from bulls meeting the standards as detailed by the

"Certified Semen Services (CSS) Minimum Requirements for Health of Bulls

Producing Semen for AI";

OR: 6.2.4 semen collected from bulls meeting the Agriculture Canada standards for the Health Testing of Semen Donor Bulls.

(Delete those sections not applicable)

NOTE: Details of the semen must accompany the embryos. This includes copies of export certification or documentary evidence of the semen having been collected in the CSS or AgCanada system.

6.3 The semen used to fertilize the embryos was not of United Kingdom origin (after January 1982).

7. EMBRYO COLLECTION AND PROCESSING

- 7.1 All collection, processing and storage of embryos for export to New Zealand were performed under my supervision.
- 7.2 All collection and processing of embryos for this consignment were the first performed on each day of collection.
- 7.3 All items of equipment used for the collection and processing of embryos for this consignment were used exclusively on animals donating embryos for export to New Zealand or Australia and, if not disposable, were thoroughly cleaned and sterilized between uses for successive donors. In the case of disposable equipment, each item was discarded after a single use.
- 7.4 All products of animal origin used in the collection, processing and storage of embryos have been screened for adventitious viruses including tests for cytopathology in appropriate cell cultures, for hemagglutinating and hemadsorbing viruses, and for pestiviruses by immunoperoxidase or immunofluorescence. The biological product has been handled in such a manner so as to ensure that sterility is maintained.
- 7.5 All antibiotics added to the embryos in this consignment are licensed in either the United States, Canada, or New Zealand.
- 7.6 Following collection and examination (when only embryos with intact zona pellucida were retained), the embryos in this consignment were washed (in groups of not more than 10 with all from the same donor) by approved methods according to the IETS Manual.

NOTE: An example of an approved washing technique is:

- the embryos are transferred through 5 washes in a solution containing Dulbecco's Phosphate Buffered Saline (PBS), antibiotics, and 0.4% bovine serum albumin (BSA).
- the embryos are then passed through 2 washes in a solution containing PBS and 0.25% trypsin, ph 7.6-7.8 (total time in trypsin equivalent to 60 to 90 seconds at 37° celsius):
- the embryos are then passed through 2 washes in a solution containing PBS, antibiotics, and 2% fetal calf serum (FCS), or 0.4% bovine serum albumin;
- . each wash represents at least a 100 fold dilution of the previous wash.

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- 7.7 Trypsin treatment as specified in the IETS manual was applied to all embryos in the consignment as part of the washing process.
- 7.8 Immediately following washing, each embryo was examined over its entire surface at a magnification of at least 50 times and the zona pellucida was intact and free from any adherent material.

8. **EMBRYO STORAGE**

- 8.1 Following microscopic examination each embryo for this consignment was placed in ampoules or straws (containing not more than 3 embryos from the same donor) which were clearly marked with either the identification of the donors and the date of collection or a code from which this information can be readily determined.
- 8.2 The embryos for this consignment were stored only with embryos collected for export to New Zealand in either new and unused containers or sterilized containers.
- 8.3 The refrigerant used was new and unused for any other purpose prior to use.
- 8.4 The embryos in this consignment have been stored under security in sealed containers until the time of export at a place approved by USDA or Agriculture Canada under my supervision or that of the certifying full time Government veterinarian.
- 8.5 All servicing of storage containers prior to export was carried out under my supervision or that of the certifying full time Government veterinarian.
- 8.6 The embryos in this consignment have been stored prior to export until the results of all necessary diagnostic tests of the donors were known.
- 8.7 The seals of the storage container were intact at the time of export.

								(Date)	
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Name (bold letters), signature, and address of approved collection team veterinarian.

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VET	TERINARY	CERTIFICATE B: GOVERNMENT VETERINARIAN'S DECLARATION
Ι,_		(block letters), of
		(address), being a full-time Veterinary loyed by the United States Department of Agriculture, Animal and Plant Health Service (USDA/APHIS), hereby certify that:
1.	ENDORSE	MENT
	1.1.	I have received and examined the records of the donor animal's histories, collection results, etc., and of the diagnostic tests performed on the donors of embryos in this consignment.
	1.2	After due enquiry, I have no reason to doubt the truth or accuracy of the Veterinary Health Certificate A made by the collection team veterinarian.
	1.3	The embryo collection center meets New Zealand's requirements for approval of semen/embryo collection premises (as described in Appendix I) and has been approved for the collection of embryos for export to New Zealand.
	1.4	The embryo collection team is supervised by a veterinarian who is approved after complying with the requirements of:
		1.4.1 the American Embryo Transfer Association (AETA) certification program:
AND):	1.4.2 is accredited by USDA/APHIS.
2.	DISEASE	FREEDOM
	2.1	During the 1 year period immediately prior to the date of the first collection of embryos for this consignment and during the period since that date, both Canada and the USA have remained free from the following diseases:
		2.1.1 foot-and-mouth disease;
		2.1.2 rinderpest;
		2.1.3 contagious bovine pleuropneumonia;
		2.1.4 Rift Valley fever;
		2.1.5 lumpy skin disease.
3.	EXPORT	
	3.1	The final audit of the process, documentation and sealing of the storage containers for this consignment were performed under the supervision of a full-time officer of the USDA.
	3.2	The canister containing the embryos for export to New Zealand was sealed with a seal bearing the code:

Full time Veterinary Officer of United States Department of Agriculture, Animal and Plant Health Inspection Service Date

Health Cei	rtificate	e No	
(Valid	only if	the USDA	Veterinary Seal
	Appears	over the	e Certificate No.)

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APPENDIX I

REQUIREMENTS FOR SEMEN/EMBRYO COLLECTION PREMISES

The collection center may be either:

- a. a center licensed under current government regulation, or
- b. a government approved but unlicensed premises.

The basis for the approval of unlicensed premises is the demonstration that the premises where collection occurs is operated as an integrated facility and the staff handling the animals and collecting the embryos are aware of the necessity for identifying donors, normal sanitary procedures and good husbandry practices. Specifically:

1. **OPERATION:** Staff must undertake normal measures against cross-contamination prior to handling any animals in the center and prior to any testing, treatment or collection procedures being carried out.

With regard to semen/embryo collection, all matters related to hygiene, health, testing/treatments and quarantine must be under the direct control and supervision of the government-approved team veterinarian who shall provide the veterinary health certification required.

2. **FACILITIES:** The center must comprise clearly distinguishable animal accommodation, embryo collection and embryo processing facilities.

Construction of the collection and processing facilities must be such as to facilitate cleaning and disinfection. The facility should be protected against rodents and insects.

Semen/embryos must be processed in a room/building/mobile laboratory set aside for that purpose, separate from areas where animals are housed and where semen/embryos are collected. Semen/embryos must be stored in a room/building separate from all other facilities and able to be secured.

All equipment used to collect, process and store the semen/embryos and which comes into contact with either the donor animals or the semen/embryos must be used exclusively on animals donating semen/embryos for New Zealand or Australia, and if not disposable, must be disinfected before and between uses.